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John V. Biernacki  
Jones, Day, Reavis & Pogue  
North Point  
901 Lakeside Avenue  
Cleveland, OH 44114

EXAMINER

TON, ANTHONY T

ART UNIT	PAPER NUMBER
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2661

4  
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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/759,931

Applicant(s)

SHEN ET AL.

Examiner

Anthony T Ton

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 13-33 and 40-48 is/are rejected.
- 7) ☒ Claim(s) 7-12 and 34-39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 43 and 45-47** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) **Claim 43** recites the limitation "**a global** communication network" in **line 2** is not adequately disclosed by the specification or drawing. Therefore, the limitation is indefinite.

b) **Claim 45** recites the limitation "**a plurality** of speech engines" in **line 2** is not adequately disclosed by the specification or drawing. Therefore, the limitation is indefinite.

c) **Claim 46** recites the limitation "**a plurality** of speech recognition engines" in **line 2** is not adequately disclosed by the specification or drawing. Therefore, the limitation is indefinite.

d) **Claim 47** recites the limitation "**a plurality** of text-to-speech engines" in **line 2** is not adequately disclosed by the specification or drawing. Therefore, the limitation is indefinite.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-6, 13, 15-18, 23-33, 40, 42-44 and 48** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ball et al** (Patent No. 6,600,736) in view of **Jimenez et al** (US Patent Application Publication No. 2002/0006124).

a) **In Regarding to Claims 26-28: Ball et al disclosed** a computer-implemented telephony server that provides services based upon a call from a user (*see Fig.2: server 205*), comprising:

at least one telephone network interface card that receives an incoming call from a user who is using a telephone communication device (*see Fig.2 and col.5 line 60-col.6 line 17: the input/output interface of the server 205 is used to connect the server 205 to the PSTN 202, this interface is used to receive/transmit a call from/to a user who is using the telephone device 201 via the network PSTN 202 (hence Ball et al. disclosed the telephone network interface card as the instant claim)*);

a uniform resource locator (URL) administrator that retrieves over a computer network a voice application from a remote web site (*see Fig.2: web servers 203 and 208; and see Fig.3A: step 302 "telephone/IP server answers telephone call and makes request to URL of Web server providing first interactive voice response service" (hence Ball et al. disclosed a URL administrator that exists in the server 205 so that a voice application can be retrieved from the remote web sever 203 or 208)*);

a voice markup language engine that uses the retrieved voice application to have a speech-based conversation over the telephone communication device with the user to obtain service data from the user (*see Fig.2: block 206 interpreter in the server 205; and see Fig.3A: steps 303-305*); and

wherein the voice markup language engine uses the retrieved voice application to perform the requested service based upon the user-provided service data (*see col.6 lines 25-56: an HTTP request for the phone markup language of the web server 203 providing a brokerage house's stock quoting service is made by the end user 201 by dialing the 800 number associated with the brokerage house's stock quoting service (hence the requested service)*).

**Ball et al. failed to explicitly disclose** wherein the telephony server is substantially stateless with respect to the user call after the requested service is performed as recited in **Claim 26**; wherein the user-provided service data generated based upon the call is removed from the telephony server so that the telephony server is substantially stateless with respect to the user call after the requested service is performed as recited in **Claim 27**; and wherein the voice application is removed from the telephony server so that the telephony server is substantially stateless with respect to the user call after the requested service is performed as recited in **Claim 28**.

**Ball et al. did not clearly disclose** such subject matters of the instant claims. However, **Ball et al. disclosed** an option that for the user to end a service provided by the telephony server 205 after a first requested service is performed (*see col.8 lines 13-22: If you would like to end this session please say "7", or hang-up. Thank you*).

**Jimenez et al. disclosed** a method using a command to remove an audio file saved in the location indicated by the URL (*see page 4 Table 1: Delete <URL>*).

**It would have been obvious** to one having ordinary skill in the art at the time the invention was made to implement such a telephony server is substantially stateless with respect to the user call after the requested service is performed of the instant claim throughout the

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telephone/IP server 205 of Ball et al, as taught by Jimenez et al so that a telephony server can have enough data memory to provide next transaction services, **the motivation being** to save memory for a telephony server.

**b) In Regarding to Claim 1:** This claim is rejected for the same reasons as Claims 26-28 because the apparatus in Claims 26-28 can be used to practice the method steps of Claim 1.

**c) In Regarding to Claim 30:** **Ball et al further disclosed** wherein the voice application is a voice markup language application (see col.2 lines 64-67: phone markup language PML).

**It would have been obvious** to combine Ball et al and Jimenez et al for the same reason as described in Claims 26-28.

**d) In Regarding to Claim 3:** This claim is rejected for the same reasons as Claims 26-28 and 30 because the apparatus in Claims 26-28 and 30 can be used to practice the method steps of Claim 3.

**e) In Regarding to Claim 31:** **Ball et al further disclosed** wherein the voice application is a Voice Extensible Markup Language application (see col.2 lines 64-67: voice extensible markup language).

**It would have been obvious** to combine Ball et al and Jimenez et al for the same reason as described in Claims 26-28.

**f) In Regarding to Claim 32:** **Ball et al further disclosed** wherein the voice markup language engine transmits a voice application request to the remote web site over a computer network, wherein the web site selects a voice markup language program based upon the request and provides the selected voice markup language program to the telephony server (see col.11

*lines 37-44: the telephone/IP server receives and transmits interactive dialogs over a packet-based computer network).*

**It would have been obvious** to combine Ball et al and Jimenez et al for the same reason as described in Claims 26-28.

**g) In Regarding to Claim 5:** This claim is rejected for the same reasons as Claims 26-28 and 32 because the apparatus in Claims 26-28 and 32 can be used to practice the method steps of Claim 5.

**h) In Regarding to Claim 33:** **Ball et al further disclosed** wherein the provided voice markup language program interacts by a speech-based conversation with the user (*see col.3 lines 9-21: only a subset of information might be audibility presented to the end user if the user makes choices from a hierarchical menu*).

**It would have been obvious** to combine Ball et al and Jimenez et al for the same reason as described in Claims 26-28.

**i) In Regarding to Claim 6:** This claim is rejected for the same reasons as Claims 26-28 and 33 because the apparatus in Claims 26-28 and 33 can be used to practice the method steps of Claim 6.

**j) In Regarding to Claims 40 and 42:** **Ball et al further disclosed** wherein the telephony server routes the call from the user over a Voice Over IP (VoIP) connection as recited **in Claim 40**; and the telephony server routes the call from the user over a public switched telephone network as recited **in Claim 42** (*see Fig.1: phone 201, PSTN and IP network*).

**It would have been obvious** to combine Ball et al and Jimenez et al for the same reason as described in Claims 26-28.

k) **In Regarding to Claims 13 and 15:** This claim is rejected for the same reasons as Claims 26-28 and 40, and 26-28 and 42 because the apparatus in Claims 26-28 and 40, and 26-28 and 42 can be used to practice the method steps of Claim 13 and 15, respectively.

l) **In Regarding to Claims 43 and 44:** **Ball et al further disclosed** wherein the computer network is a global communication network as recited **in Claim 43**; and the computer network is an Internet network as recited **in Claim 44** (*see col.1 lines 8-11: a computer network such as the Internet (hence a global communication network)*).

**It would have been obvious** to combine Ball et al and Jimenez et al for the same reason as described in Claims 26-28.

m) **In Regarding to Claims 16 and 17:** This claim is rejected for the same reasons as Claims 26-28 and 43, and 26-28 and 44 because the apparatus in Claims 26-28 and 43, and 26-28 and 44 can be used to practice the method steps of Claim 16 and 17, respectively.

n) **In Regarding to Claim 18:** **Ball et al and Jimenez disclosed** all aspects of this claim as set forth in Claim 1.

**Ball et al. failed to explicitly disclose** the method further comprising the step of after performing the requested service, transferring at least a portion of the user service data to a remote computer on the computer network and removing the voice application and the user service data from the telephony server.

**Jimenez et al disclosed** a method of using a command to remove an audio file saved in the location indicated by the URL (*see page 4 Table 1: Delete <URL>*); Also, Jimenez showed in an embodiment depicted in FIG. 2 is an optional web cache 124 to buffer retrieved information or heavily accessed information to expedite and optimize service to the user (*see*



*page 2 section [0022]*, hence Jimenez et al can transfer at least a portion of the service data to the remote computer to save such a data in the cache 124.

**It would have been obvious** to one having ordinary skill in the art at the time the invention was made to implement such a step of the method of Jimenez et al throughout the system of as taught Ball et al, so that a service can be provided to a user more faster, **the motivation being** to expedite and optimize service to users.

**o) In Regarding to Claim 48: Ball et al further disclosed** wherein the URL administrator determines which voice application to retrieve over the computer network based upon dialed number of the incoming call (*see col.6 lines 26-38: Using the determined URL; dialing the 800 number*).

**It would have been obvious** to combine Ball et al and Jimenez et al for the same reason as described in Claims 26-28.

**p) In Regarding to Claim 24:** These claims are rejected for the same reasons as Claims 26-28 and 48 because the apparatus in Claims 26-28 and 48 can be used to practice the method steps of Claim 24.

**q) In Regarding to Claim 23: Ball et al and Jimenez et al disclosed** all aspects of this claim as set forth in Claim 1.

**Ball et al. failed to explicitly disclose** wherein the telephony server provides additional functions for operation of the voice application on the telephony server, wherein the additional functions are selected from the group consisting of timer means, registration means, logger means, health monitor means, alarm means, alert means, and combinations thereof.

**Jimenez et al disclosed** methods and apparatus for an audio web retrieval telephone system. In which, Jimenez et al disclosed an audio browser 120 that supports Voice XML application performing automatically as shown in Figs. 3a-3d, hence Jimenez et al disclosed such subject matters of the instant claim.

**It would have been obvious** to one having ordinary skill in the art at the time the invention was made to implement such subject matters of the instant claim throughout the interactive voice system of Ball et al, as taught by Jimenez et al so that a service can be provided to an end user effectively, **the motivation being** automatically executed the Voice XML application.

**r) In Regarding to Claim 25: Ball et al further disclosed** wherein a database stores an association between phone numbers and computer network identifiers, said method further comprising the steps of:

determining the dialed number of the incoming call (*see col.6 lines 14-25: data lookup is performed based on the number dialed by the end user*);

retrieving from the database a computer network identifier that is associated with the determined dialed number (*see col.6 lines 14-35: <http://www.stockquote.foo.com/main.pml>*); and

retrieving over the computer network the voice application that is identified by the computer network identifier (*see col.6 line 26-46: the web server 203 associated with that URL (hence the voice application is identified by the computer network identifier)*)).

**It would have been obvious** to combine Ball et al and Jimenez et al for the same reason as described in Claims 26-28.

s) **In Regarding to Claim 29:** **Ball et al** and **Jimenez et al** disclosed all aspects of this claim as set forth in Claim 26.

**Ball et al. failed to explicitly disclose** wherein the user uses a wireless communication device.

**Jimenez et al disclosed** such a wireless communication device (*see Fig.2: wireless phone 104*).

**It would have been obvious** to one having ordinary skill in the art at the time the invention was made to implement such a wireless communication device throughout the communication device 201 of Ball et al, as taught by Jimenez et al so that a service can be provided to wireless device such as mobile telephones, **the motivation being** to provide a multiple service for both wired and wireless devices.

t) **In Regarding to Claim 2:** This claim is rejected for the same reasons as Claims 26-29 because the apparatus in Claims 26-29 can be used to practice the method steps of Claim 2.

u) **In Regarding to Claim 4:** **Ball et al further disclosed** wherein the voice application is a Voice Extensible Markup Language application (*see col.2 lines 64-67: voice extensible markup language*).

**It would have been obvious** to combine Ball et al and Jimenez et al for the same reason as described in Claims 26-28.

5. **Claims 14 and 41** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ball et al** (Patent No. 6,600,736) in view of **Jimenez et al** (US Patent Application Publication No.

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**2002/0006124)** as applied to claims 26-28 above, and further in view of the **Admitted Prior Art**.

a) **In Regarding to Claim 41:** **Ball et al** and **Jimenez et al** disclosed all aspects of this claim as set forth in Claim 26.

**Ball et al. failed to explicitly disclose** wherein the telephony server routes the call from the user over a Voice on the Net (VON) connection.

**In the instant specification,** applicant has admitted an example of a VON product is available from Intel located in Austin Texas.

**It would have been obvious** to one having ordinary skill in the art at the time the invention was made to implement such a VON throughout the voice over IP network of **Ball et al** to utilize packetized voice in Internet, **the motivation being** to provide a service from telephone to workstation and vice versa, and to minimize the impacts of packet delay.

b) **In Regarding to Claim 14:** This claim is rejected for the same reasons as Claims 26-28 and 41 because the apparatus in Claims 26-28 and 41 can be used to practice the method steps of Claim 14.

6. **Claims 19-21 and 45-47** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ball et al** (Patent No. 6,600,736) in view of **Jimenez et al** (US Patent Application Publication No. 2002/0006124) as applied to claims 26-28 above, and further in view of **Aldous et al** (US Patent No. 6,654,722).

a) **In Regarding to Claims 45-47:** **Ball et al** and **Jimenez et al** disclosed all aspects of these claims as set forth in Claim 26.

**Ball et al. failed to explicitly disclose** further comprising a plurality of speech engines, wherein at least one of the speech engines is selected to operate with the retrieved voice application as recited in **Claim 45**; a plurality of speech recognition engines, wherein at least one of the speech recognition engines is selected to operate with the retrieved voice application as recited in **Claim 46**; and a plurality of text-to-speech engines, wherein at least one of the text-to-speech engines is selected to operate with the retrieved voice application as recited in **Claim 47**.

**Ball et al did not clearly disclose** such engines as recited by the instant claims. However, **Ball et al disclosed** dialogs that are specified as pages of phone markup language PML or its equivalent. The PML or its equivalent allows a service creator to specify output from audio files and text via text-to-speech (text-to-speech engine), input fields for digits and spoken information (speech engine), and choices form listing using dual tone mutual frequency DTMF and speech recognition grammars (speech recognition engine) (*see col3 lines 46-56*).

**Aldous et al disclosed** such engines of the speech application as shown in Fig.3.

**It would have been obvious** to one having ordinary skill in the art at the time the invention was made to provide such a plurality of engines to the speech application as taught by Ball et al to utilize both voice and data in a VoIP network, **the motivation being** to synthesize text into digitized audio data and such a digitized audio data can be transmitted over VoIP networks.

**b) In Regarding to Claims 19-21:** These claims are rejected for the same reasons as Claims 26-28 and 45, 26-28 and 46, and 47, respectively because the apparatus in Claims 26-28 and 45, 26-28 and 46, and 47 can be used to practice the method steps of Claims 19-21, respectively.

7. **Claim 22** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Ball et al** (Patent No. 6,600,736) in view of **Jimenez et al** (US Patent Application Publication No. 2002/0006124) as applied to claims 26-28 above, and further in view of **Turunen et al** (US Patent No. 6,487,595).

**Ball et al** and **Jimenez disclosed** all aspects of this claim as set forth in Claim 1.

**Both Ball et al. and Jimenez failed to explicitly disclose** the method further comprising the step of detecting an abnormal condition during execution of the voice application and providing notification of the detected abnormal condition.

**Turunen et al disclosed** such a detecting step (*see col.2 lines 24-37: if either check fails, the RSVP returns an error notification to the application process that originated the request*).

**It would have been obvious** to one having ordinary skill in the art at the time the invention was made to implement such a detecting step of Turunen et al throughout the conversant® system as taught by Ball et al in col.6 line 6, so that a service can be continuing to provide to a user effectively, **the motivation being** to maintain high quality service levels to users.

***Allowable Subject Matter***

8. **Claims 7-12 and 34-39** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony T Ton whose telephone number is 703-305-8956. The examiner can normally be reached on M-F: 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W Olms can be reached on 703-305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ATT  
5/15/2004



**KENNETH VANDERPUYE  
PRIMARY EXAMINER**